

REMARKS

Favorable reconsideration of this application as presently amended and in light of the following discussion is respectfully requested.

Claims 9-16 are pending, Claims 9-11 and 14 having been amended and new Claim 16 added by way of the present amendment. Support for Claim 16 is found in the originally filed claims and in the specification and therefore no new matter is added.

In the outstanding Office Action, Claims 8-12, 15 and 15 were rejected as being unpatentable over Goesele et al. (U.S. Patent No. 6,150,239, hereinafter “Goesele”) in view of Usenko (U.S. Patent No. 6,995,075, hereinafter “Usenko”); and Claim 13 was rejected as being unpatentable over Goesele in view of Usenko and in further view of Maleville et al. (U.S. Patent No. 6,403,450, hereinafter “Maleville”).

All of the comments provided in the amendment filed August 6, 2007 are still believed to be relevant, and therefore incorporated herein by reference.

New Claim 16 has been added and includes a step of “determining a profile of acceptor defects that will be created by an implantation step in the thin film from the implanted face towards the buried film”. The profile allows the thin film of a given thickness to be obtained, wherein a number of acceptor defects is compatible with predetermined electrical properties of the thin film.

Non-limiting support for this feature is found in the specification at page 7, line 17 continuing to page 8, line 10 for example. In particular, the present inventors have observed that the implantation current makes it possible to play on the defect creation efficiency and so implanting at low current density makes it possible to reduce the concentration of defects (page 8, lines 17-21). Further non-limiting support is found at page 9, lines 20-27 and in Figure 1 as well as Figure 2. Therefore no new matter is added.

An advantage of this approach is that the resulting film is defined by the profile of defects created by the passage of implanted ions as well as by the healing capability of the technological steps carried out by the fracture of the initial substrate (specification, page 9, lines 5-11).

In contrast, it is respectfully submitted that none of the prior art references, namely Goesele, Usenko or Maleville, teach or suggest the claimed “determining a profile” step as presently claimed in Claim 16. As such, it is respectfully submitted that any combination of Goesele, Usenko and Maleville, would not disclose all the elements of Claim 16, nor would they teach or suggest all of the elements of Claim 16.

Furthermore, it is respectfully submitted that one of ordinary skill in the art would not have recognized the advantage of this feature (namely the determining a profile step), without the benefit of the observations made by the present inventors. In contrast to conventional films, a film of bigger thickness than the wanted thickness, according to the present invention, may be transferred and then significantly thinned down. This thinning does not correspond to the elimination of surface roughness as usually realized after cleaving. Moreover, it is respectfully submitted that one of ordinary skill in the art would not have considered obvious the number of compensating electrical defects to be proportional to the profile of the implanting defects. This is because according to conventional thinking, it was not considered to implant more deeply and then to thin down the superficial part of the layer containing more implanting defects. According to conventional wisdom, an optimization according to the process disclosed by Goesele would have been to control the implanting parameters, as suggested in the Office Action, so as to simply obtain directly the number of desired defects in the thin film.

As it is believed that none of the asserted prior art references teach or suggest the step of "determining a profile...", according to new Claim 16, it is respectfully submitted that each of Claims 9-16, as amended, patentably defines over the asserted prior art.

Consequently, in view of the present amendment and in light of the foregoing comments, it is respectfully submitted that the invention defined by Claims 9-16, as amended, patentably defines over the asserted prior art. The present application is therefore believed to be in condition for formal allowance.

Respectfully submitted,

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